



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/936,883A

DATE: 01/26/2002
TIME: 12:40:03

Input Set : A:\F2-101DP1PCTsq.txt
Output Set: N:\CRF3\01262002\I936883A.raw

PS

3 <110> APPLICANT: MIYATA, Toshio
 5 <120> TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use
 6 Thereof
 8 <130> FILE REFERENCE: F2-101DP1PCT
 C01> 10 <140> CURRENT APPLICATION NUMBER: US/09/936,883A
 C01> 11 <141> CURRENT FILING DATE: 2001-12-21
 13 <150> PRIOR APPLICATION NUMBER: JP 1999-75305
 14 <151> PRIOR FILING DATE: 1999-03-19
 16 <150> PRIOR APPLICATION NUMBER: JP 1999-306623
 17 <151> PRIOR FILING DATE: 1999-10-28
 19 <160> NUMBER OF SEQ ID NOS: 21
 21 <170> SOFTWARE: PatentIn Ver. 2.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 1143
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
 28 <220> FEATURE:
 29 <221> NAME/KEY: CDS
 30 <222> LOCATION: (1)...(1140)
 32 <300> PUBLICATION INFORMATION:
 33 <302> TITLE: A mesangium-predominant gene, megsin, is a new serpin
 34 upregulated in IgA nephropathy.
 35 <303> JOURNAL: J. Clin. Invest.
 36 <304> VOLUME: 120
 37 <305> ISSUE: 4
 38 <306> PAGES: 828-836
 39 <307> DATE: 1998-08-15
 41 <400> SEQUENCE: 1
 42 atg gcc tcc ctt gct gca gca aat gca gag ttt tgc ttc aac ctg ttc 48
 43 Met Ala Ser Leu Ala Ala Ala Asn Ala Glu Phe Cys Phe Asn Leu Phe
 44 1 5 10 15
 46 aga gag atg gat gac aat caa gga aat gga aat gtg ttc ttt tcc tct 96
 47 Arg Glu Met Asp Asp Asn Gln Gly Asn Gly Asn Val Phe Phe Ser Ser
 48 20 25 30
 50 ctg agc ctc ttc gct gcc ctg gcc gtc cgc ttg ggc gct caa gat 144
 51 Leu Ser Leu Phe Ala Ala Leu Ala Leu Val Arg Leu Gly Ala Gln Asp
 52 35 40 45
 54 gac tcc ctc tct cag att gat aag ttg ctt cat gtt aac act gcc tca 192
 55 Asp Ser Leu Ser Gln Ile Asp Lys Leu Leu His Val Asn Thr Ala Ser
 56 50 55 60
 58 gga tat gga aac tct tct aat agt cag tca ggg ctc cag tct caa ctg 240
 59 Gly Tyr Gly Asn Ser Ser Asn Ser Gln Ser Gly Leu Gln Ser Gln Leu
 60 65 70 75 80

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/936,883A

DATE: 01/26/2002
TIME: 12:40:03

Input Set : A:\F2-101DP1PCTsq.txt
Output Set: N:\CRF3\01262002\I936883A.raw

62	aaa	aga	gtt	ttt	tct	gat	ata	aat	gca	tcc	cac	aag	gat	tat	gat	ctc	288
63	Lys	Arg	Val	Phe	Ser	Asp	Ile	Asn	Ala	Ser	His	Lys	Asp	Tyr	Asp	Leu	
64							85			90					95		
66	agc	att	gtg	aat	ggg	ctt	ttt	gct	gaa	aaa	gtg	tat	ggc	ttt	cat	aag	336
67	Ser	Ile	Val	Asn	Gly	Leu	Phe	Ala	Glu	Lys	Val	Tyr	Gly	Phe	His	Lys	
68							100			105					110		
70	gac	tac	att	gag	tgt	gcc	gaa	aaa	tta	tac	gat	gcc	aaa	gtg	gag	cga	384
71	Asp	Tyr	Ile	Glu	Cys	Ala	Glu	Lys	Leu	Tyr	Asp	Ala	Lys	Val	Glu	Arg	
72							115			120					125		
74	gtt	gac	ttt	acg	aat	cat	tta	gaa	gac	act	aga	cgt	aat	att	aat	aag	432
75	Val	Asp	Phe	Thr	Asn	His	Leu	Glu	Asp	Thr	Arg	Arg	Asn	Ile	Asn	Lys	
76							130			135					140		
78	tgg	gtt	gaa	aat	gaa	aca	cat	ggc	aaa	atc	aag	aac	gtg	att	ggt	gaa	480
79	Trp	Val	Glu	Asn	Glu	Thr	His	Gly	Lys	Ile	Lys	Asn	Val	Ile	Gly	Glu	
80	145						150			155					160		
82	ggt	ggc	ata	agc	tca	tct	gct	gta	atg	gtg	ctg	gtg	aat	gct	gtg	tac	528
83	Gly	Gly	Ile	Ser	Ser	Ser	Ala	Val	Met	Val	Leu	Val	Asn	Ala	Val	Tyr	
84							165			170					175		
86	ttc	aaa	ggc	aag	tgg	caa	tca	gcc	ttc	acc	aag	agc	gaa	acc	ata	aat	576
87	Phe	Lys	Gly	Lys	Trp	Gln	Ser	Ala	Phe	Thr	Lys	Ser	Glu	Thr	Ile	Asn	
88							180			185					190		
90	tgc	cat	ttc	aaa	tct	ccc	aag	tgc	tct	ggg	aag	gca	gtc	gcc	atg	atg	624
91	Cys	His	Phe	Lys	Ser	Pro	Lys	Cys	Ser	Gly	Lys	Ala	Val	Ala	Met	Met	
92							195			200					205		
94	cat	cag	gaa	cgg	aag	ttc	aat	ttg	tct	gtt	att	gag	gac	cca	tca	atg	672
95	His	Gln	Glu	Arg	Lys	Phe	Asn	Leu	Ser	Val	Ile	Glu	Asp	Pro	Ser	Met	
96							210			215					220		
98	aag	att	ctt	gag	ctc	aga	tac	aat	ggt	ggc	ata	aac	atg	tac	gtt	ctg	720
99	Lys	Ile	Leu	Glu	Leu	Arg	Tyr	Asn	Gly	Gly	Ile	Asn	Met	Tyr	Val	Leu	
100	225						230			235					240		
102	ctg	cct	gag	aat	gac	ctc	tct	gaa	att	gaa	aac	aaa	ctg	acc	ttt	cag	768
103	Leu	Pro	Glu	Asn	Asp	Leu	Ser	Glu	Ile	Glu	Asn	Lys	Leu	Thr	Phe	Gln	
104							245			250					255		
106	aat	cta	atg	gaa	tgg	acc	aat	cca	agg	cga	atg	acc	tct	aag	tat	gtt	816
107	Asn	Leu	Met	Glu	Trp	Thr	Asn	Pro	Arg	Arg	Met	Thr	Ser	Lys	Tyr	Val	
108							260			265					270		
110	gag	gta	ttt	ttt	cct	cag	ttc	aag	ata	gag	aag	aat	tat	gaa	atg	aaa	864
111	Glu	Val	Phe	Phe	Pro	Gln	Phe	Lys	Ile	Glu	Lys	Asn	Tyr	Glu	Met	Lys	
112							275			280					285		
114	caa	tat	ttg	aga	gcc	cta	ggg	ctg	aaa	gat	atc	ttt	gat	gaa	tcc	aaa	912
115	Gln	Tyr	Leu	Arg	Ala	Leu	Gly	Leu	Lys	Asp	Ile	Phe	Asp	Glu	Ser	Lys	
116							290			295					300		
118	gca	gat	ctc	tct	ggg	att	gct	tcg	ggg	ggt	cgt	ctg	tat	ata	tca	agg	
119	Ala	Asp	Leu	Ser	Gly	Ile	Ala	Ser	Gly	Gly	Arg	Leu	Tyr	Ile	Ser	Arg	
120	305						310			315					320		
122	atg	atg	cac	aaa	tct	tac	ata	gag	gtc	act	gag	gag	ggc	acc	gag	gct	1008
123	Met	Met	His	Lys	Ser	Tyr	Ile	Glu	Val	Thr	Glu	Glu	Gly	Thr	Glu	Ala	
124							325			330					335		
126	act	gct	gcc	aca	gga	agt	aat	att	gta	gaa	aag	caa	ctc	cct	cag	tcc	1056

RAW SEQUENCE LISTING DATE: 01/26/2002
 PATENT APPLICATION: US/09/936,883A TIME: 12:40:03

Input Set : A:\F2-101DP1PCTsq.txt
 Output Set: N:\CRF3\01262002\I936883A.raw

127 Thr Ala Ala Thr Gly Ser Asn Ile Val Glu Lys Gln Leu Pro Gln Ser
 128 340 345 350
 130 acg ctg ttt aga gct gac cac cca ttc cta ttt gtt atc agg aag gat 1104
 131 Thr Leu Phe Arg Ala Asp His Pro Phe Leu Phe Val Ile Arg Lys Asp
 132 355 360 365
 134 gac atc atc tta ttc agt ggc aaa gtt tct tgc cct tga 1143
 135 Asp Ile Ile Leu Phe Ser Gly Lys Val Ser Cys Pro
 136 370 375 380
 139 <210> SEQ ID NO: 2
 140 <211> LENGTH: 380
 141 <212> TYPE: PRT
 142 <213> ORGANISM: Homo sapiens
 144 <400> SEQUENCE: 2
 145 Met Ala Ser Leu Ala Ala Ala Asn Ala Glu Phe Cys Phe Asn Leu Phe
 146 1 5 10 15
 148 Arg Glu Met Asp Asp Asn Gln Gly Asn Gly Asn Val Phe Phe Ser Ser
 149 20 25 30
 151 Leu Ser Leu Phe Ala Ala Leu Ala Leu Val Arg Leu Gly Ala Gln Asp
 152 35 40 45
 154 Asp Ser Leu Ser Gln Ile Asp Lys Leu Leu His Val Asn Thr Ala Ser
 155 50 55 60
 157 Gly Tyr Gly Asn Ser Ser Asn Ser Gln Ser Gly Leu Gln Ser Gln Leu
 158 65 70 75 80
 160 Lys Arg Val Phe Ser Asp Ile Asn Ala Ser His Lys Asp Tyr Asp Leu
 161 85 90 95
 163 Ser Ile Val Asn Gly Leu Phe Ala Glu Lys Val Tyr Gly Phe His Lys
 164 100 105 110
 166 Asp Tyr Ile Glu Cys Ala Glu Lys Leu Tyr Asp Ala Lys Val Glu Arg
 167 115 120 125
 169 Val Asp Phe Thr Asn His Leu Glu Asp Thr Arg Arg Asn Ile Asn Lys
 170 130 135 140
 172 Trp Val Glu Asn Glu Thr His Gly Lys Ile Lys Asn Val Ile Gly Glu
 173 145 150 155 160
 175 Gly Gly Ile Ser Ser Ala Val Met Val Leu Val Asn Ala Val Tyr
 176 165 170 175
 178 Phe Lys Gly Lys Trp Gln Ser Ala Phe Thr Lys Ser Glu Thr Ile Asn
 179 180 185 190
 181 Cys His Phe Lys Ser Pro Lys Cys Ser Gly Lys Ala Val Ala Met Met
 182 195 200 205
 184 His Gln Glu Arg Lys Phe Asn Leu Ser Val Ile Glu Asp Pro Ser Met
 185 210 215 220
 187 Lys Ile Leu Glu Leu Arg Tyr Asn Gly Gly Ile Asn Met Tyr Val Leu
 188 225 230 235 240
 190 Leu Pro Glu Asn Asp Leu Ser Glu Ile Glu Asn Lys Leu Thr Phe Gln
 191 245 250 255
 193 Asn Leu Met Glu Trp Thr Asn Pro Arg Arg Met Thr Ser Lys Tyr Val
 194 260 265 270
 196 Glu Val Phe Phe Pro Gln Phe Lys Ile Glu Lys Asn Tyr Glu Met Lys
 197 275 280 285

RAW SEQUENCE LISTING

DATE: 01/26/2002

PATENT APPLICATION: US/09/936,883A

TIME: 12:40:03

Input Set : A:\F2-101DP1PCTsq.txt

Output Set: N:\CRF3\01262002\I936883A.raw

199 Gln Tyr Leu Arg Ala Leu Gly Leu Lys Asp Ile Phe Asp Glu Ser Lys
 200 290 295 300
 202 Ala Asp Leu Ser Gly Ile Ala Ser Gly Gly Arg Leu Tyr Ile Ser Arg
 203 305 310 315 320
 205 Met Met His Lys Ser Tyr Ile Glu Val Thr Glu Glu Gly Thr Glu Ala
 206 325 330 335
 208 Thr Ala Ala Thr Gly Ser Asn Ile Val Glu Lys Gln Leu Pro Gln Ser
 209 340 345 350
 211 Thr Leu Phe Arg Ala Asp His Pro Phe Leu Phe Val Ile Arg Lys Asp
 212 355 360 365
 214 Asp Ile Ile Leu Phe Ser Gly Lys Val Ser Cys Pro
 215 370 375 380

218 <210> SEQ ID NO: 3

219 <211> LENGTH: 29

220 <212> TYPE: DNA

221 <213> ORGANISM: Artificial Sequence

223 <220> FEATURE:

224 <223> OTHER INFORMATION: Description of Artificial Sequence:Artificially
synthesized degenerative primer sequence

227 <220> FEATURE:

228 <221> NAME/KEY: misc_feature

229 <222> LOCATION: 26, 29

230 <223> OTHER INFORMATION: n is a or g or c or t.

232 <400> SEQUENCE: 3

W-233 gtgaatgctg tgtacttaaa ggcaantgn 29

236 <210> SEQ ID NO: 4

237 <211> LENGTH: 17

238 <212> TYPE: DNA

239 <213> ORGANISM: Artificial Sequence

241 <220> FEATURE:

242 <223> OTHER INFORMATION: Description of Artificial Sequence:Artificially
synthesized degenerative primer sequence

245 <220> FEATURE:

246 <221> NAME/KEY: misc_feature

247 <222> LOCATION: 3, 9, 15

248 <223> OTHER INFORMATION: n is a or g or c or t.

250 <400> SEQUENCE: 4

17

W-251 aaanagraang grtcngc

254 <210> SEQ ID NO: 5

255 <211> LENGTH: 26

256 <212> TYPE: DNA

257 <213> ORGANISM: Artificial Sequence

259 <220> FEATURE:

260 <223> OTHER INFORMATION: Description of Artificial Sequence:Artificially
synthesized degenerative primer sequence

263 <220> FEATURE:

264 <221> NAME/KEY: misc_feature

265 <222> LOCATION: 6, 9, 12, 15, 18, 21

266 <223> OTHER INFORMATION: n is a or g or c or t.

RAW SEQUENCE LISTING

DATE: 01/26/2002

PATENT APPLICATION: US/09/936,883A

TIME: 12:40:03

Input Set : A:\F2-101DP1PCTsq.txt

Output Set: N:\CRF3\01262002\I936883A.raw

→ Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 01/26/2002

PATENT APPLICATION: US/09/936,883A

TIME: 12:40:04

Input Set : A:\F2-101DP1PCTsq.txt

Output Set: N:\CRF3\01262002\I936883A.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:465 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19